Levity

PARAGLIDING HARNESS

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Introduction

We congratulate you on your purchase of a new Levity harness.

The Levity harness is built to comply with the high standards and demands for paragliding harnesses. You have chosen a state of the art product which is one of most comfortable lightweight paragliding harnesses available on the market today. A special feature of the Levity is that it is convertible into a light comfortable rucksack.

Please read this user manual carefully and use it as a guide to adjusting the harness properly for your size and shape; and to obtaining the most comfortable flight position. In addition to adjusting the harness please pay special attention to the insertion of the reserve parachute and its connection to the harness. In addition to instructions you will find a few important suggestions and tips on how to care for, clean and use your new harness.

By purchasing our equipment, you accept responsibility for being a certified paraglider pilot and you accept all risks inherent with paragliding activities including injury and death. Neither the manufacturer nor the seller of this product shall be held liable for personal or third party injuries or damages under any circumstances.

We thank you for placing your trust in us, and hope that comfortably seated you will get maximum enjoyment during many pleasant flights. We wish you maximum enjoyment from your discovery of this fantastic aerial sport and of course happy landings.

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Technical description

The Levity harness was developed to satisfy the demands for a modern paragliding harness, and incorporates feed-back from the most demanding pilots, who want to travel with a light comfortable harness convertible into the light rucksack. MAC PARA's long experience of the design and development of harnesses combined with the use of the best selected materials guarantees a combination of longevity and comfort during use combined with perfect flying characteristics.

The Levity harness is suitable for all pilots, from beginner to the experienced pilot who prefers a slightly inclined sitting position. The Levity can be flown with all types of paraglider unless the manufacturer of your particular model requires a specific harness to be used with their glider.

The breathable back and seat material provides pleasing leg support and a comfortable sitting position. The harness is equipped with an air-back protector. The airbag provides excellent protection against the shock caused by impact. The rear rucksack, which provides storage space, acts as an airbag protecting the back. The harness has two lateral pockets made from elastic mesh material for small objects. There is an elastic mesh pocket for small objects on the rescue container.

The Levity harness is supplied inclusive of carbon plate, relax-bar, ventral cockpit for instruments and container for reserve parachute and speed bar system with Brummel-hooks, as usually delivered on MAC paragliders.

Adjusting your Levity

The Levity harness offers you several adjustment choices, making it possible for the pilot to find his ideal position according to his size and shape. The harness is adjustable using shoulder, back, chest and legs straps. The harness is correctly adjusted when you feel comfortable without any pressure on shoulders or back.

Individual settings

Setting the angle between your back and the vertical axis.

Please devote sufficient time to setting the harness correctly. Preferably hang it on a simulator or similar, and check it, spending long enough to simulate long periods of flight. This gives you the opportunity, to easily try a number of different settings at one time before undertaking your first flight.

Adjusting the lateral straps

Adjustments can be made to the lateral straps leading trough the flat buckles to your back.

When correctly adjusted you feel only light pressure on both back and shoulder. If the lateral straps are too loose you will feel pressure on your shoulders from the shoulder straps. By pulling on them you change the position. If you feel pressure on your back, release the lateral straps by pulling the loop on the flat buckles within the tunnel of Neoprene material.

Adjusting the lateral straps.

Adjusting the shoulder straps.

Adjusting the shoulder straps

Adjustments can be made to the shoulder straps leading trough the flat buckles to your shoulders.

When correctly adjusted you should feel only light pressure on both back and shoulder. If the shoulder straps are too loose you will feel pressure on your back from the lateral straps. By pulling on them you can change the position. If you feel pressure on your shoulders release the shoulder straps by pulling the loop on the flat buckles.

Adjusting the chest strap

The chest strap is secured with a T-lock system buckle. This prevents any chance of the pilot falling out of the harness if he forgets to fasten the legs straps. The clicks must be audible! By adjusting the chest strap the pilot determines the sensitivity of the harness and the ABS system.

Adjustment of the distance between the main carabineers is made using the narrower strap leading through an adjustable trimmer placed on the left side of the chest strap. The harness is most sensitive to weight-shift when the trimmer is released. The shorter the distance between the main carabineers the less sensitive the harness becomes to weight shift and the effect of the ABS-system is increased. By pulling the black coloured “release” loop the chest strap can be slackened.

Adjusting the chest strap.

Adjusting the bottom lateral straps.

Adjusting the leg straps

The leg straps are secured with automatic Cobra buckles. The click must be audible! Correctly adjusted, the leg straps control the freedom of movement of the legs, before and during take off. If the leg straps are too tight your upright position in the harness is limited and not comfortable. If they are too slack you can have trouble sitting in the harness after take off.

Never forget to close the buckles on the leg straps!

Adjusting the bottom lateral straps - angle of seat and back support

The Levity harness is equipped with lateral 25mm straps leading from back part through the D-rings placed under main carabineers to the rear of the seat plate. Using these straps you can change angle of the seat plate and support your back to find your preferred position. Adjustments are made with the narrower strap leading trough the plastic buckles. The plastic buckles are hidden by side wall of the harness. When the straps are tightened (pulling up the yellow coloured straps) you will feel better stabilization and support to the hips. You can release them by pulling down on the black coloured loop. After preferred adjustment the lose part of the strap can be hidden on the side.

Attention: These straps are used solely to change the angle of the seat plate. They can not replace the function of the main straps and for this reason there is a stop point on the lateral straps. If you prefer a more prone position then we recommend the choice of either the XCL or WOW harness.

Emergency parachute assembly

The Levity harness is compatible with most available emergency parachutes. The envelope system container (combined with cockpit for instruments) is connected to the main carabineers and is placed on the ventral part the harness. The cockpit/container is large enough for most of the reserve parachutes available on the market today. The reserve parachute bridle has a large central loop, reinforced with a cover of red coloured *CORDURA.* The rescue system bridle is connected to the harness at two points at shoulder level, in order to distribute load and to ensure a correct landing position in the event of a reserve parachute deployment, therefore reducing the possibility of injury to a minimum. The rescue canopy can be inserted in the original rescue inner container with the original Levity handle and pins according to the pictures.

Assembly in outer container

1. Place the Levity inner container with rescue canopy onto the outer container as shown in the pictures below. The rescue canopy bridle leads to the tunnel on the right-hand side. The line loop of the rescue canopy is placed in the tunnel on the right side.
Attention! **Other placements can lead to malfunction of the system!**
2. You need 2 pieces of 50 cm spare line to place through the elastic loops on lateral flaps. Thread this spare line through each elastic loop. This will help close the pocket. Then lace the spare lines step by step through the bottom and followed upper front flap. Thread the elastic loops into the smallest of the eyelets on the pocket flaps. Close the flaps following the order shown in the photographs below. Push the metal pins on the handle into the elastic loops. It is essential to remove the cords after this operation. The cords should be pulled out slowly in order not to damage the elastic loops by excessive friction. Finally, the handle should be positioned using the Velcro. The Levity harness is ready for the reserve parachute container to be attached, using the plastic buckles.

Correct assembly must be checked by a test release of the rescue system. If the system is working then reassemble in the same way as described. When connecting the reserve parachute to the harness, ensure that the parachute bridle passes outside the harness' main attachment strap, relax bar and then leads to the rescue bridle.
Attention! Before each take-off check the locking pins securing the outer container.

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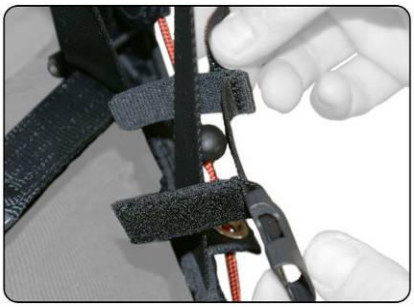
Emergency parachute connection

A rescue canopy with a short bridle can be attached directly to the integrated connection bridle. Alternatively connection can be made using a carabineer with a minimum strength of 2000 kg. The Levity cockpit / rescue container is connected to the harness by straps leading through the main carabineers and by plastic buckles. These plastic buckles are held in place by a Velcro connection and are placed on main attachment straps. See the pictures below!



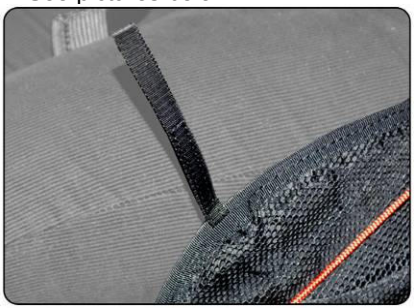
Attention! If you are unsure of the correct assembly of your rescue system ask your dealer, or contact the MAC PARA importer in your country direct.

Reserve parachute deployment

The position of the reserve parachute deployment handle is visible in flight. We recommend practicing gripping the reserve parachute handle regularly, so that the action of reaching for the handle becomes instinctive. In emergency situations, the deployment procedure is as follows: Look for the reserve parachute handle and grasp it firmly with one hand. Pull the handle outwards in order to extract the reserve parachute from the ventral container. Look for a clear area, and, in a continuous motion, throw the reserve parachute away from yourself and the paraglider. After the reserve parachute has opened, avoid any chance of entanglement by pulling in the paraglider, gripping one of the brake lines, in order to collapse the glider. On landing, adopt an upright body position, and ensure that you perform a parachute landing fall to minimize the risk of injury.

Relax-bar

The Levity harness can be equipped with an adjustable relax-bar with rubber cords. The relax-bar is used to keep the legs stretched out and the feet resting on a support. Assembly: The relax-bar straps lead through narrow lateral straps placed on the sides in front of the harness and through D-rings placed just under main carabineers. The right position of the relax bar is adjustable by plastic buckles. When using the relax-bar check the connection of the reserve parachute to the harness. Ensure that the parachute bridle passes outside and over the relax-bar and then leads to the rescue bridle. Therefore the rescue bridle must be placed on upper right side of the rescue outer container when assembled into the outer container! Correct assembly of emergency parachute must be checked by a test release of the rescue system. See pictures below!



Speed system

The Levity harness is equipped with a speed system and includes Brummel hooks as supplied on MAC paragliders. The speed bar lines feature stoppers preventing free movement of the speed bar unless required. The first step of the speed bar should maintain its position to the front after first use and be operated by foot without hand help.

Towing

The Levity harness is suitable for towing. The release system must be connected to the same main carabineers attached to the paraglider risers. To attach the release system properly, insert the release bridle in such a way that the release itself is in front of the risers, in the direction of flight. For further details, refer to the documentation provided with your tow release, or ask a qualified towing instructor at your flying site.

Tandem flying

The Levity harness is suitable for tandem flying as passenger harness. Thanks to a well designed leg strap system it offers an outstanding freedom of leg movement. This facilitates an easy run during take off. If the passenger is not an advanced pilot, then remove the emergency parachute from the harness to avoid an involuntary deployment.

Flying above water

It is inadvisable to use the Levity harness on flights over water. In the event of the pilot being forced to land on the water, the airbag, which is filled with air, may force the harness into a position that holds the pilot underwater. MAC PARA recommends the use of a suitable lifejacket when flying over water.

Harness check before take off

Checking the Levity harness before take-off is crucial. Always check the following points:

- Is the rescue system handle attached properly?
- Are rescue system securing pins inserted correctly?
- Are all pockets and zippers closed properly?
- Make sure that each buckle is fastened properly. Check for correct fastening by pulling on both straps leading to the buckle.
- Make sure that the main carabineers are fastened properly
- The speed bar is attached correctly to the glider

Before putting on the harness, ensure that the zip on the back is completely closed. In any case, the performance of the airbag underneath remains unchanged, because the opening between the airbag and the rucksack is of dimensions to ensure consistent results whether the zip is open or closed. With the zip closed, the part of the airbag behind the back, corresponding to the volume of the rucksack, functions more effectively. In order to achieve uniform inflation of the rucksack/airbag behind the back, remember to loosen the rucksack packing straps completely, if they were tightened previously.

Attention! Pay special attention during winter in ice or snow. Always clear any ice or snow before fastening the buckles.

Rucksack

In order to switch from harness mode to rucksack mode, open the long zip on the back of the harness completely; fold the seat against the back of the harness, leaving the straps and buckles outside the sandwich created by back and seat. Place the paraglider into the rucksack bag, on top of the harness and close one side of the zipper. Then close the other side of the zipper while pushing down on the paraglider. The remaining space above should be sufficient to store the helmet, instruments, and extra garments. Once all equipment has been placed inside, if necessary the two side straps can be tightened in order to hold the contents firmly in position. This stabilizes the load and makes carrying the rucksack more comfortable. The adjustment straps on the rucksack shoulder straps can be used in the same way. There are plastic buckles on each shoulder strap for fitting the adjustable handle loops that may be a useful aid for supporting your hands when walking. On the front side of the rucksack there is a large pocket. Trekking poles can be held by rubber loops. The poles should be inserted with the tips upwards in order not to damage the rucksack. Be careful when placing them into rear pocket in flight configuration.

Maintenance and repairs

We suggest you have your harness checked by an authorised person once every two years. If you have your reserve repacked, ask for a harness check. The main aluminium carabineers can be used only under instructions and regulations of the carabineer manufacturer. Impacts may create undetectable cracks that, because of continual cyclic loads, could result in structural damage. Avoid dragging your harness on the ground and rocks etc. Protect from unnecessary exposure to UV rays, avoid storing when damp and avoid exposure to extreme temperatures.

Clean the harness only with lukewarm water with a light soapy solution. Use of chemical cleaners or thinners is expressly prohibited. Keep automatic buckles clean. They may be lubricated once in a year with a silicon spray.

The customer may not do any harness repairs or replacement of spare parts him/herself. This can lead to limitation of functionality, or can even endanger your life. For this reason any repair or corrections must be made directly by the manufacturer.

Technical description

Description:	convertible paragliding harness
Max. load:	120 kg
Distance between karabiner and seat:	size S-44 cm, size M-46 cm, size L-47 cm, size XL-47 cm
Distance between karabiner (min/max):	size S-34/49 cm, size M-34/49 cm, size L-34/49 cm, size XL- 35/55 cm
Size of carbon plate (width/lenght):	size S-35/37 cm, size M-35/37 cm, size L-36/40 cm, size XL- 37/43 cm
Recomended pilots height:	S - under 170 cm, M - 165/178 cm, L - 175/190 cm, size XL- 185/200 cm
Weight (without rescue chute and karabineers):	S - 3,70 kg, M - 3,75 kg, L - 3,80 kg, XL - 3,85kg
Back protection:	Airbag
Rescue system:	Ventral front container combined with a cockpit for instruments
Certification:	

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